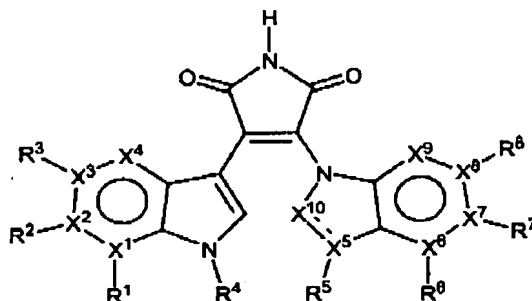


Amendments to the Claims:

This listing of claims replaces all prior versions of claims in the application

1. (currently amended) A compound represented by the following formula:



or a pharmaceutically acceptable salt thereof
wherein:

$X^1 - X^3$ are independently C or N;

X^4 is CH or N, wherein not more than two of $X^1 - X^4$ is N;

$X^6 - X^8$ are independently C or N;

X^9 is CH or N, wherein not more than two of $X^6 - X^9$ is N;

X^5 is N, R^5 is a lone pair, and X^{10} is CH, when the bond between X^5 and X^{10} is a double bond; or

X^5 is CH, R^5 is H, and X^{10} is CH_2 , when the bond between X^5 and X^{10} is a single bond; or

X^5 is C, R^5 is defined below, and X^{10} is CH, when the bond between X^5 and X^{10} is a double bond;

$R^1 - R^3$ and $R^6 - R^8$ represent a lone pair or O when each respective $X^1 - X^3$ and $X^6 - X^8$ is N; or

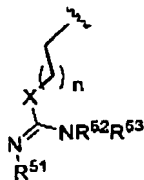
when $X^1 - X^3$ or $X^6 - X^8$ is C, each respective $R^1 - R^3$ and $R^6 - R^8$ is independently selected from the group consisting of:

- a) H, substituted or unsubstituted C(1-8) alkyl, halogen, azido, cyano, nitro, or $\text{NR}^{21}\text{R}^{22}$, wherein R^{21} represents H or C(1-8) alkyl, and R^{22} represents H, substituted or unsubstituted C(1-8) alkylcarbonyl, substituted or unsubstituted arylcarbonyl, heterocycle, substituted or unsubstituted heteroarylcarbonyl, substituted or unsubstituted C(1-8) alkylaminocarbonyl, substituted or unsubstituted arylaminocarbonyl;
- b) OR^{23} , wherein R^{23} is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl;
- c) SR^{23} , wherein R^{23} is defined as in b);
- d) $\text{O}(\text{CH}_2)_j\text{R}^{24}$, $\text{O}(\text{CH}_2)_j\text{-O-R}^{24}$, or $\text{O}(\text{CH}_2)_j\text{-S-R}^{24}$, wherein j is an integer from 1 to 8, and R^{24} is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl;
- e) $\text{S}(\text{CH}_2)_j\text{R}^{24}$, $\text{S}(\text{CH}_2)_j\text{-O-R}^{24}$, or $\text{S}(\text{CH}_2)_j\text{-S-R}^{24}$, wherein j and R^{24} are defined as in d);
- f) $\text{C}\equiv\text{C-R}^{25}$, $\text{C}\equiv\text{C-OR}^{25}$, or $\text{C}\equiv\text{C-CO}_2\text{R}^{25}$, wherein R^{25} is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
- g) CH=CH-R^{25} , CH=CH-OR^{25} , or $\text{CH=CH-CO}_2\text{R}^{25}$, having a stereochemistry of E or Z, and R^{25} is defined as in f);
- h) $\text{C}\equiv\text{C-NR}^{25}\text{R}^{26}$ or $\text{C}\equiv\text{CCONR}^{25}\text{R}^{26}$, wherein R^{25} is defined as in f), and R^{26} is defined as R^{25} , and R^{25} and R^{26} are selected independently;
- i) $\text{CH=CH-NR}^{25}\text{R}^{26}$ or $\text{CH=CHCONR}^{25}\text{R}^{26}$, having a stereochemistry of E or Z, wherein R^{25} and R^{26} are independently defined as in h);
- j) $(\text{CH}_2)_k\text{R}^{25}$, $(\text{CH}_2)_k\text{-COOR}^{25}$, or $(\text{CH}_2)_k\text{-OR}^{25}$, wherein k is an integer from 2 to 6 and R^{25} is defined as in f);
- k) $(\text{CH}_2)_k\text{NR}^{25}\text{R}^{26}$, $(\text{CH}_2)_k\text{CONR}^{25}\text{R}^{26}$, wherein R^{25} and R^{26} are selected independently, and R^{25} and R^{26} are defined as R^{25} in f); and
- l) $\text{CH}_2\text{XR}^{27}$, wherein X is O or S and R^{27} is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

R^4 is selected from the group consisting of:

- m) H, substituted or unsubstituted C(1-8) alkyl; and

n)



wherein $X=O$, S , or NH , $n=1$ to 4 ; and wherein R^{51} is H ; R^{52} and R^{53} are independently chosen from the group consisting of H , substituted or unsubstituted $C(1-8)$ alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system;

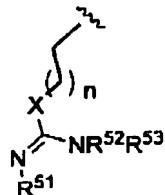
R^5 is selected from the group consisting of:

~~e) a lone pair when X^5 is N ; or~~

~~when X^5 is C , R^5 is selected from the group consisting of~~

p) H , substituted and unsubstituted $C(1-8)$ alkyl; and

q)



wherein $X=O$, S , or NH , $n=1$ to 4 ; and wherein R^{51} is H ; R^{52} and R^{53} are independently chosen from the group consisting of H , substituted or unsubstituted $C(1-8)$ alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system; ~~or,~~

~~wherein when R^1 , R^2 and R^5 are H , and R^4 is H or CH_3 , then at least one of X^1 - X^9 represents a ring member other than carbon.~~

2. (previously presented) A compound, according to claim 1, in which X^1 - X^3 are independently C .

3. (previously presented) A compound, according to claim 1, in which X^4 is CH .

4. (previously presented) A compound, according to claim 1, in which $X^6 - X^8$ are independently C.

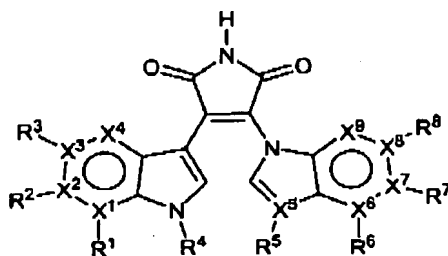
5. (currently amended) A compound, according to claim 1, in which X^9 is CH or N.

6. (previously presented) A compound, according to claim 1, in which X^5 is C, X^{10} is CH and the bond between X^5 and X^{10} is a double bond.

7. (withdrawn) A compound, according to claim 1, in which X^5 is N, R^5 is a lone pair, X^{10} is CH and the bond between X^5 and X^{10} is a double bond.

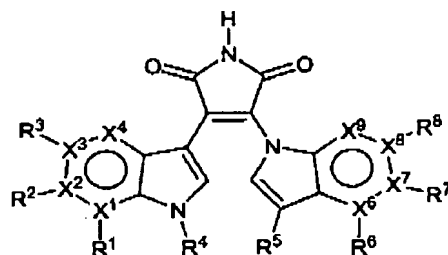
8. (previously presented) A compound, according to claim 1, in which X^5 is CH, R^5 is H, X^{10} is CH_2 and the bond between X^5 and X^{10} is a single bond.

9. (currently amended) A compound having the following formula:



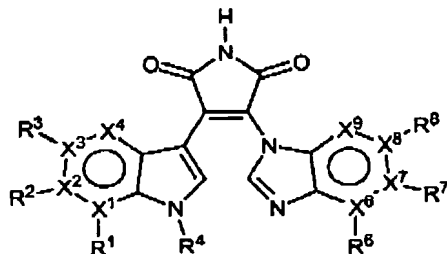
wherein X^5 is C or N, and $X^1 - X^3$, X^4 , $X^6 - X^8$, $R^1 - R^3$, R^4 , R^5 and $R^6 - R^8$ are as defined in claim 1.

10. (previously presented) A compound having the following formula:



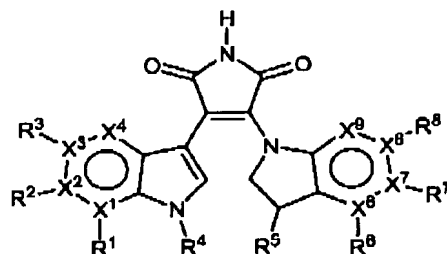
wherein X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 1.

11. (withdrawn) A compound having the following formula:



wherein X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 1.

12. (previously presented) A compound having the following formula:



wherein X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 1.

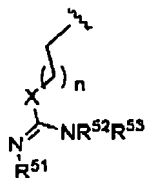
13. (previously presented) A compound, according to claim 1, in which when X^1 - X^3 or X^6 - X^8 is C, each respective R^1 - R^3 and R^6 - R^8 is independently selected from the group consisting of:

- H, halogen;
- OR^{23} , wherein R^{23} is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl; and
- $O(CH_2)_j-R^{24}$, $O(CH_2)_j-O-R^{24}$, or $O(CH_2)_j-S-R^{24}$, wherein j is an integer from 1 to 8, and R^{24} is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl.

14. (previously presented) A compound, according to claim 1, in which R^4 is selected from the group consisting of:

- H, substituted or unsubstituted C(1-8) alkyl; and

n)

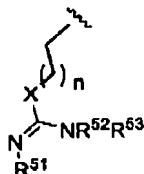


wherein $X=O$, S , or NH , $n=2$; and wherein R^{51} is H ; R^{52} and R^{53} are independently chosen from the group consisting of H , substituted or unsubstituted $C(1-8)$ alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

15. (previously presented) A compound, according to claim 14, in which R^4 is selected from the group consisting of:

m) H , substituted or unsubstituted $C(1-8)$ alkyl; and

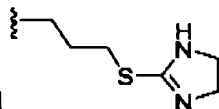
n)



wherein $X=S$, $n=2$; and wherein R^{51} is H ; R^{52} and R^{53} are both H , or R^{51} and R^{52} are combined to form a heteroaryl ring system.

16. (previously presented) A compound, according to claim 15, in which R^4 is selected from the group consisting of: H , methyl, $CH_2CH_2CH_2OH$, $CH_2CH_2CH_2NH_2$,

$CH_2CH_2CH_2N_3$, $CH_2CH_2CH_2SC(=NH)NH_2$ and

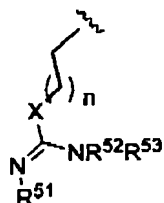


17. (withdrawn) A compound, according to claim 1, in which X^5 is N and R^5 is a lone pair.

18. (previously presented) A compound, according to claim 1, in which X^5 is C or CH , and R^5 is selected from the group consisting of:

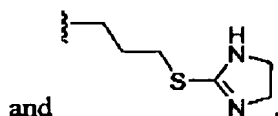
p) H , substituted and unsubstituted $C(1-8)$ alkyl; and

g)

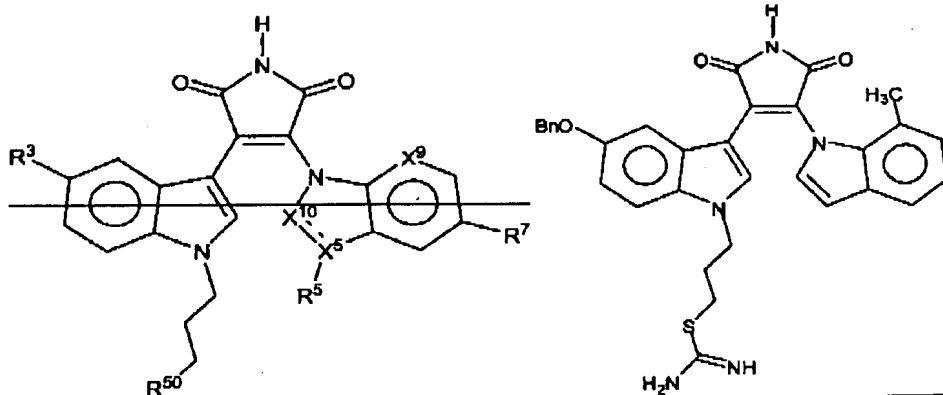


wherein X=S, n=2; and wherein R⁵¹ is H; R⁵² and R⁵³ are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R⁵¹ and R⁵² are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

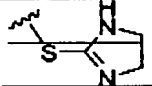
19. (previously presented) A compound, according to claim 18, in which X^5 is C or CH, and R^5 is selected from the group consisting of H, methyl, $CH_2CH_2CH_2OH$, $CH_2CH_2CH_2SC(=NH)NH_2$, $CH_2CH_2CH_2N(CH_3)_2$, $CH_2CH_2CH_2N_3$, $CH_2CH_2CH_2NH_2$,



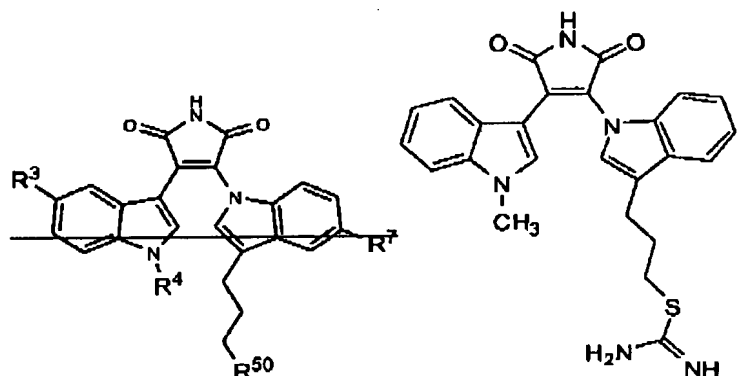
20. (currently amended) A compound, according to the following formula



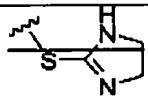
~~selected from the group consisting of:~~

Cpd.	Bond between X ⁵ /X ¹⁰	R ³	R ⁵⁰	R ⁷	X ⁵ /R ⁵	X ⁹	X ¹⁰
124	Double	H	-OH	H	CH	CH	CH
124	Double	BnO	-OH	H	CH	CH	CH
125	Double	H	-OH	H	CMo	CH	CH
126	Double	H	-OH	BnO	CH	CH	CH
127	Double	H	-OH	H	CH	CH	CMo
128	Double	H	-OH	H	N	CH	CH
129	Double	BnO	-OH	H	CMo	CH	CH
130	Double	H	-OH	H	CH	N	CH
134	Double	BnO	-OH	H	CH	CH	CMo
132	Double	H	-OH	F	CH	CH	CH
133	Double	H	-N(CH ₃) ₂	H	CH	CH	CH
136	Double	BnO	-N(CH ₃) ₂	H	CH	CH	CH
137	Double	H	-N(CH ₃) ₂	H	CMo	CH	CH
138	Double	H	-N(CH ₃) ₂	BnO	CH	CH	CH
139	Double	H	-N(CH ₃) ₂	H	CH	CH	CMo
140	Double	H	-N(CH ₃) ₂	H	N	CH	CH
141	Double	BnO	-N(CH ₃) ₂	H	CMo	CH	CH
142	Double	H	-N(CH ₃) ₂	H	CH	N	CH
143	Double	H	-SC(=NH)NH ₂	H	CH	CH	CH
146	Double	H	-SC(=NH)NH ₂	H	CMo	CH	CH
147	Double	H	-SC(=NH)NH ₂	BnO	CH	CH	CH
148	Double	BnO	-SC(=NH)NH ₂	H	CH	CH	CH
149	Double	BnO	-SC(=NH)NH ₂	H	CH	CMo	CH
150	Double	BnO	-SC(=NH)NH ₂	H	CH	CH	CMo
151	Double	H	-SC(=NH)NH ₂	H	CH	CH	CMo
152	Double	H	-SC(=NH)NH ₂	H	CH	N	CH
153	Double	MeO	-SC(=NH)NH ₂	H	CH	CH	CH
154	Double	F	-SC(=NH)NH ₂	H	CH	CH	CH
155	Double	H	-SC(=NH)NH ₂	F	CH	CH	CH
156	Double	H		H	CH	CH	CH
159	Single	H	-SC(=NH)NH ₂	H	CH ₂	CH	CH ₂
160	Double	OCH ₂ S Ph	-SC(=NH)NH ₂	H	CH	CH	CH
164	Double	H	-N ₃	H	CH	CH	CH
162	Double	H	-NH ₂	H	CH	CH	CH

21. (currently amended) A compound according to the following formula:



selected from the group consisting of:

Example	R ³	R ⁵⁰	R ²	R ⁴
163	H	OH	H	H
164	H	OH	H	Me
165	BnO	OH	H	H
166	H	SC(=NH)NH ₂	H	H
167	H	SC(=NH)NH ₂	H	Me
168	BnO	SC(=NH)NH ₂	H	Me
169	H	N(CH ₃) ₂	H	Me
170	H		H	Me
171	H	N ₃	H	Me
172	H	NH ₂	H	Me

22.(previously presented) A composition comprising a compound, according to claim 1, in combination with carrier.

23. (withdrawn) The composition, according to claim 22, further including a chemotherapeutic agent.

24. (withdrawn) The composition, according to claim 22, further including a cytokine.

25. (withdrawn) The composition, according to claim 22, further including anti-sense oligonucleotides.

26. (withdrawn) A method of treating an inflammatory disorder, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat the disorder.

27. (withdrawn) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat the cancer.

28. (withdrawn) A method of treating a cell proliferative disorder, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat the disorder.

29. (withdrawn) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, in combination with another chemotherapeutic agent.

30. (withdrawn) Use of a compound or a composition, according to claim 1 or 22, so as to induce apoptosis in Jurkat cells.

31. (withdrawn) Use of a compound or a composition, according to claim 1 or 22, so as to induce apoptosis in cancer cell lines.

32. (withdrawn) The use, according to claim 31, in which the cancer cell lines are prostate cancer and breast cancer cell lines

33. (withdrawn) A method of treatment or prevention of a condition resulting from loss of growth and cellular differentiation control, the method comprising: administration to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat or prevent the condition.